



C57BL/6J *Grin2b*^{fl^{ox}} / J

Stock No: 032664 | **Grin2b flox**

Coisogenic, Endonuclease-Mediated Mutation



CRYO RECOVERY

PLACE ORDER

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

Overview

Also Known As: **Grin2b flox**

This *Grin2b*^{fl^{ox}} CRISPR/Cas9 generated mutant of the *Grin2b* gene possesses *loxP* sites flanking 599 nucleotides (exon 4 of

Ensembl transcript 201 and exon 5 of transcript 202). This strain may be useful for generating conditional mutations in applications related to neurodevelopment.

Donating Investigator

Cathleen Lutz, The Jackson Laboratory

[READ MORE +](#)

GENETIC OVERVIEW

Genetic Background

Generation

Grin2b^{em5Lutz}

Allele Type

Gene Symbol

Gene Name

Endonuclease-mediated
(Conditional ready (e.g.
floxed), No functional change)

Grin2b

glutamate receptor, ionotropic, NMDA2B (epsilon 2)

[VIEW GENETICS](#)

RESEARCH APPLICATIONS

Neurobiology Research

Developmental Biology Research

[VIEW ALL RESEARCH APPLICATIONS](#)

BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

[VIEW PRICE LIST](#)

Details

Detailed Description

CRISPR/cas9 endonuclease mediated genome editing of the *Grin2b*, glutamate receptor, ionotropic, NMDA2B (epsilon 2), gene was used to introduce *loxP* sites flanking 599 nucleotides (exon 4 of Ensembl transcript 201 and exon 5 of transcript 202). The targeted *Grin2b* gene encodes part of the excitatory neurotransmitter N-methyl-D-aspartate (NMDA) receptor. Mutations in this gene have been associated with Mental Retardation, Autosomal Dominant 6, with or without Seizures and Early Infantile Epileptic Encephalopathy 27. Mice that are homozygous for this allele are viable and fertile. When these mutant mice are bred to mice that

express Cre recombinase, resulting offspring will have *loxP* site flanked region deleted in the *cre*-expressing tissues. As the mice are characterized, we will modify the strain description and add phenotype data.

This model was generated in collaboration with the Simons Foundation Autism Research Initiative (SFARI).

+ Development

+ Control Suggestions

- Genetics

+ *Grin2b*^{em5Lutzy}

- Disease/Phenotype

+ Disease Terms

+ Research Areas By Genotype

+ Mammalian Phenotype Terms by Genotype

+ References

- Technical Support

C H A T O  F L I N E

C O N T A C T T E C H N I C A L S U P P O R T

Genotyping Protocols

Probe: *Edil3*^{Tg(Sox2-cre)1Amc}

Probe: *Grin2b*^{em2Lutzy} (5'*Loxp*)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

When maintaining a live colony, these mice can be bred as homozygotes.

[Additional Breeding and Husbandry Support](#)

Mating System

Homozygote x Homozygote

Citation

When using the *Grin2b* flox

mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #032664 in your Materials and Methods section.

[Facility Barrier Level Descriptions](#)

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, [G200](#)

➔ Pricing & Availability



Cryo Recovery

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

Domestic International

Pricing effective for USA, Canada and Mexico shipping destinations

Cryorecovery - Domestic Pricing

SERVICE	GENOTYPE	PRICE
Cryo Recovery	Heterozygous for Grin2b5Lutz>	\$2,854.50

We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. Please check genotypes which will be recovered. While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. Animals are typically ready to ship in 11-14 weeks. If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.

Cryorecovery to establish a [Dedicated Supply](#) for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

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➔ Terms Of Use

Terms of Use

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